

AMENDMENTS TO THE CLAIMS:

The following Listing of Claims will replace all prior versions, and listings, of claims in the present application.

LISTING OF CLAIMS:

18. (Currently Amended) A method for at least one of (a) testing detectability of at least one flaw in a component and (b) evaluating ultrasonic signals of the flaw, comprising:

generating an electronic specification of the flaw, the electronic specification including at least one of (a) a two-dimensional and (b) a three-dimensional point pattern;

after the generating, manufacturing a test specimen, for each point of the point pattern, a microcrack in the test specimen generated at a corresponding position to form a microcrack field representing the flaw; and

recording and evaluating ultrasonic signals of the test specimen.

19. (Previously Presented) The method according to claim 18, wherein the microcracks are produced in the manufacturing step by internal laser engraving.

20. (Previously Presented) The method according to claim 18, wherein a largest dimension of the microcracks is smaller than a wavelength used for recording the ultrasonic signals in the recording step.

21. (Previously Presented) The method according to claim 18, wherein the test specimen is manufactured in the manufacturing step of a material transparent to visible light.

22. (Previously Presented) The method according to claim 21, wherein the transparent material includes at least one of (a) crown glass, (b) optical glass, (c) borosilicate glass and (d) quartz glass.

23. (Previously Presented) The method according to claim 18, wherein a material of the test specimen has approximately same elastic parameters as a material of the component.

24. (Currently Amended) The method according to claim 18, wherein the generating step ~~include~~ includes generating several specifications having one point pattern each, the point patterns differing with regard to at least one of (a) size, (b) shape and (c) orientation, and for each specification:

the manufacturing of a test specimen being performed in accordance with a corresponding specification; and

the recording and evaluation of ultrasonic signals of the corresponding test specimen being performed.

25. (Currently Amended) A method for at least one of (a) ascertaining and (b) testing a resolution of an ultrasonic testing system, comprising:

at least one of (a) testing detectability of at least one flaw in a component and (b) evaluating ultrasonic signals of the flaw, including:

generating an electronic specification of the flaw, the electronic specification including at least one of (a) a two-dimensional and (b) a three-dimensional point pattern;

after the generating, manufacturing a test specimen, for each point of the point pattern, a microcrack in the test specimen generated at a corresponding position to form a microcrack field representing the flaw; and

recording by the testing system and evaluating ultrasonic signals of the test specimen.

26. (Currently Amended) A device for at least one of (a) testing detectability of at least one flaw in a component and (b) evaluating an ultrasonic signal of the flaw, comprising:

a device adapted to generate an electronic specification of the flaw, the specification including at least one of (a) a two-dimensional and (b) a three-dimensional point pattern;

a device adapted to produce a test specimen after generation of the electronic specification of the flaw, for each point of the point pattern, a microcrack produced at a position of the point to form a microcrack field representing the flaw; and

a device adapted to record and evaluate ultrasonic signals of the test specimen.

27. (Previously Presented) The device according to claim 26, wherein the device adapted to produce the test specimen is adapted to produce the test specimen such that a largest dimension of the microcracks is smaller than wavelength used to record the ultrasonic signals.

28. (Previously Presented) The device according to claim 26, wherein the device adapted to produce the test specimen includes a laser apparatus adapted to produce microcracks by internal engraving.

29. (Currently Amended) A method, comprising:

at least one of (a) ascertaining and (b) testing a resolution of an ultrasonic testing system by a device adapted to at least one of (a) test a detectability of at least one flaw in a component and (b) evaluate an ultrasonic signal of the flaw, the device including:

a device adapted to generate an electronic specification of the flaw, the specification including at least one of (a) a two-dimensional and (b) a three-dimensional point pattern;

a device adapted to produce a test specimen after generation of the electronic specification of the flaw, for each point of the point pattern, a microcrack produced at a position of the point to form a microcrack field representing the flaw; and

a device adapted to record and evaluate ultrasonic signals of the test specimen, the testing system arranged as a part of the device adapted to record and evaluate the ultrasonic signals.

30. (Previously Presented) A test specimen for calibration of an ultrasonic testing system for at least one of (a) testing a component and (b) evaluating ultrasonic signals of a flaw, the test specimen including microcracks having positions

predefined by an electronic specification having at least one of (a) a two-dimensional and (b) a three-dimensional point pattern that corresponds to the flaw.

31. (Previously Presented) The test specimen according to claim 30, wherein a largest dimension of the microcracks is smaller than a wavelength for an ultrasonic test to be calibrated.

32. (Previously Presented) The test specimen according to claim 30, wherein the test specimen is formed of a material transparent to visible light.

33. (Previously Presented) The test specimen according to claim 32, wherein the transparent material includes at least one of (a) crown glass, (b) optical glass, (c) borosilicate glass and (d) quartz glass.

34. (Previously Presented) The test specimen according to claim 30, wherein the test specimen is formed of a material having approximately same elastic parameters as a material of the component.